



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/687,137	10/16/2003	DeQuan Yu	10541-1838	8258
48003	7590 01/10/2005		EXAMINER	
BRINKS HOFER GILSON & LIONE/CHICAGO/COOK			MOULIS, THOMAS N	
PO BOX 1039 CHICAGO, I			ART UNIT	PAPER NUMBER
cilicites, i	2. 00010		3747	
			DATE MAIL ED: 01/10/2004	-

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	10/687,137	YU ET AL.				
Office Action Summary	Examiner	Art Unit				
	Thomas N Moulis	3747				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	_·					
2a) This action is FINAL . 2b) ☐ This	This action is FINAL . 2b)⊠ This action is non-final.					
	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-5 and 10-14 is/are rejected. 7) ⊠ Claim(s) 6-9 and -15 is/are objected to. 8) □ Claim(s) are subject to restriction and/or						
Application Papers						
 9) The specification is objected to by the Examiner 10) The drawing(s) filed on 16 October 2003 is/are: Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner 	a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage				
Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10/16/03.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa					

Application/Control Number: 10/687,137

Art Unit: 3747

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is indefinite for reciting "the first angle" and "the second angle" without proper antecedent basis. Perhaps claim 4 should depend from claim 3.

Claim 14 is indefinite for reciting "the bore" without proper antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-5 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Riggle ('910).

The reference discloses a pressure regulating valve for a returnless fuel system of an engine having the claimed elements of a valve body having a frustoconical sealing

Art Unit: 3747

surface, a valve guide (58). Note the angle of the valve body and the valve seat angles are such that the valves seals with line contact in a known fashion. SEE Figures 2 and 5-6.

Allowable Subject Matter

- 5. Claims 6-9 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the valves having frustoconical valve heads.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas N Moulis whose telephone number is 703 308-2618. The examiner can normally be reached on M-Th.

Art Unit: 3747

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 703 308-1946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas N Moulis Primary Examiner Art Unit 3747

tm